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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/118,824	07/20/1998	JE HYUNG LEE		9394

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EXAMINER
TRAN, THAI Q

ART UNIT	PAPER NUMBER
2615	#25

DATE MAILED: 01/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/118,824	LEE ET AL.	
	Examiner	Art Unit	
	Thai Tran	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31,33-50 and 52-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-22* is/are allowed.

6)☒ Claim(s) *23-31,33-50 and 52-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. *08/227,281* .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Reissue Applications

1. The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Response to Arguments

2. Applicant's arguments with respect to claims 23-31 and 33-50 and 52-61 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 23, 26-30, 33-34, 36-42, 45-49, 52-53 and 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al ('446) in view Yuen et al ('409) and Official Notice.

Regarding claim 23, Ishii et al discloses an apparatus for controlling recording in a recording device (Figs. 1A-1B) comprising an input unit (32 of Fig. 1B, col. 5, lines 54-59) receiving video data; a data generating circuit (col. 10, lines 21-26) generating a relative position data associated with one of a plurality of specific data in the received video data and indicative of a plurality of relative position from a current nth specific data location to each of a n+1, n+2, ..., n+m specific data location, where m is greater than 2; and a recording unit (35 of 1B, col. 5, lines 54-59, col. 8, lines 1-45 and col. 10, lines 21-26) coupled to the data generating circuit and recording the video data and the relative position data on a medium. However, Ishii et al does not specifically disclose that the apparatus is **digital recording apparatus** and that the data generating circuit generates **a plurality of relative position data such that each specific data includes the associated relative position data**.

Yuen et al teaches that the VCR has a magnetic tape (col. 1, lines 20-30) and that the directory is stored on the tape preferably by writing it repeatedly on a VBI line so that, when the tape is inserted into the indexing VCR, the VCR independently of the point of tape insertion can quickly locate and read a copy of the directory from the VBI line (col. 13, lines 20-33).

It would have been obvious to one of ordinary skill in the art at the time of the invention to repeatedly write the management database of Ishii et al on the recording medium as taught by Yuen et al so that when the recording medium of Ishii et al is inserted into the VCR, the VCR independently of the point of the tape insertion can quickly read the management database of Ishii et al.

It is noted that the digital VCR is old and well known in the art and therefore Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well-known digital VCR into Ishii et al's system in order to increase the quality of the video signal to be recorded/reproduced because digital VCR has higher quality than analog VCR.

Regarding claim 26, Ishii et al discloses the claimed wherein the medium includes a magnetic medium (col. 5, lines 54-59).

Regarding claim 27, Ishii et al discloses the claimed wherein each of the plurality of relative position data includes a plurality of distance indicators, each distance indicator indicating a distance between the current nth specific data location and one of the n+1, n+2, ..., n+m specification data location (col. 10, lines 21-26).

Regarding claim 28, Ishii et al discloses the claimed wherein said distance is represented with a number of distance units present between the current nth specific data location and one of the n+1, n+2, ..., n+m specific data locations (col. 10, lines 21-26).

Regarding claim 29, Ishii et al disclose the claimed wherein the distance unit is a track on the storage medium (col. 8, lines 1-15 and col. 10, lines 21-26).

Regarding claim 30, Ishii et al discloses the claimed a formatting circuit (32 of Fig. 1B, col. 5, lines 54-59 and col. 8, lines 1-45).

Claim 33 is rejected for the same reasons discussed in claim 23 and additionally Ishii et al discloses a detection circuit (col. 10, lines 21-26) coupled to the reproducing unit and detecting one of the plurality of relative position data from the reproduced digital data and a control circuit (col. 10, lines 21-26) coupled to the detection circuit, receiving a command and controlling the reproducing unit to reproduce at least another specific data based on the detected relative position data and the command.

Regarding claim 34, Ishii et al discloses the claimed wherein the detection circuit includes a decoding circuit (col. 10, lines 21-26 and col. 19, lines 27-38).

Regarding claim 36, Ishii et al discloses the claimed wherein each of the plurality of relative position data includes a plurality of distance indicators, each distance indicator indicating a distance between the current nth specific data location and one of the n+1, n+2, ..., n+m specification data location (col. 10, lines 21-26).

Regarding claim 37, Ishii et al discloses the claimed wherein said distance is represented with a number of distance units present between the current nth specific data location and one of the n+1, n+2, ..., n+m specific data locations (col. 10, lines 21-26).

Regarding claim 38, Ishii et al disclose the claimed wherein the distance unit is a track on the storage medium (col. 8, lines 1-15 and col. 10, lines 21-26).

Regarding claim 39, Ishii et al discloses the claimed wherein the reproducing unit includes a motor for moving the recording medium (col. 8, lines 1-14).

Regarding claim 40, the proposed combination of Ishii et al ('446) and Yuen et al (409) discloses all the features of the instant invention except for providing a calculating circuit for calculating a rotational speed of the motor based on the detected relative position data.

The capability of controlling the rotational of the drum of the VTR by using a calculating circuit calculating a rotational speed of the drum motor is old and well know in the art and therefore Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to control the rotating of the drum of the VTR of Ishii et al by using the well known calculating circuit in order to accurately record/reproduce video signal by controlling the rotating of the drum of the VTR.

Regarding claim 41, Ishii et al discloses the claimed wherein the reproducing unit includes reading heads (col. 19, lines 27-38).

The method claims 42 and 45-49 are rejected for the same reasons as discussed in the apparatus claims 23 and 26-30 above.

The method claims 52-53 and 55-57 are rejected for the same reason as discussed in the apparatus claims 33-34 and 36-38.

Claim 58 is rejected for the same reasons as discussed in claim 40 above.

Regarding claim 59, Ishii et al discloses the claimed a detection circuit (col. 10, lines 21-33) coupled to the input unit and detecting specific data from the received

video data and wherein the data generating circuit is coupled to the detection circuit (col. 10, lines 21-33).

The claimed recording medium 60 is rejected for the same reasons as discussed in the apparatus claim 23 above.

5. Claims 24, 31, 35, 43, 50, 54 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al ('446) in view of Yuen et al ('409) and Official Notice as applied to claims 23, 26-30, 33-34, 36-42, 45-49, 52-53 and 55-60 above, and further in view of Enokida ('393).

Regarding claim 24, the proposed combination of Ishii et al, Yuen et al and the well known digital VTR discloses all the features of the instant invention except or providing that the specific data further includes I-frame data.

Enokida teaches that the video signal to be recorded/reproduced can be compressed using MPEG coding scheme, which have I-frame data (col. 5, lines 17-38).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the MPEG encoder as taught by Enokida into Ishii et al's system in order to increase the storage capacity of the recording medium by compressing the video signal to be recorded/reproduced.

Claim 31 is rejected for the same reasons as discussed in claim 24 above.

Claim 35 is rejected for the same reasons as discussed in claim 24 above.

Claim 43 is rejected for the same reasons as discussed in claim 24 above.

Claim 50 is rejected for the same reasons as discussed in claim 24 above.

Claim 54 is rejected for the same reasons as discussed in claim 24 above.

Claim 61 is rejected for the same reasons as discussed in claim 24 above.

6. Claims 25 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al ('446) in view of Yuen et al ('409) and the well known digital VTR as applied to claims 23 and 42 above, and further in view of Naimpally ('993).

Regarding claim 25, the proposed combination of Ishii et al, Yuen et al and the well known digital VTR discloses all the features of the instant invention except for providing a timing signal generating circuit for generating a timing control signal and a multiplexer coupled to the timing signal generating circuit and selectively outputting the detected specific data and the digital video data based on the timing control signal.

Naimpally teaches a digital high definition television video recorder with trick-play features having a timing signal generating circuit (328 of Fig. 3) generating a timing control signal and a multiplexer (318 of Fig. 3) coupled to the timing signal generating circuit and selectively outputting the signal to be recorded based on the timing control signal.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Ishii et al's system with the timing signal generating circuit and the multiplexer as taught by Naimpally in order to allow for trick play display of the recorded compressed video signals.

Claim 44 is rejected for the same reasons as discussed in claim 25 above.

Allowable Subject Matter

7. Claims 1-22 are allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

TTQ
January 13, 2002

THAI TRAN
PRIMARY EXAMINER